## Supplementary

## Information

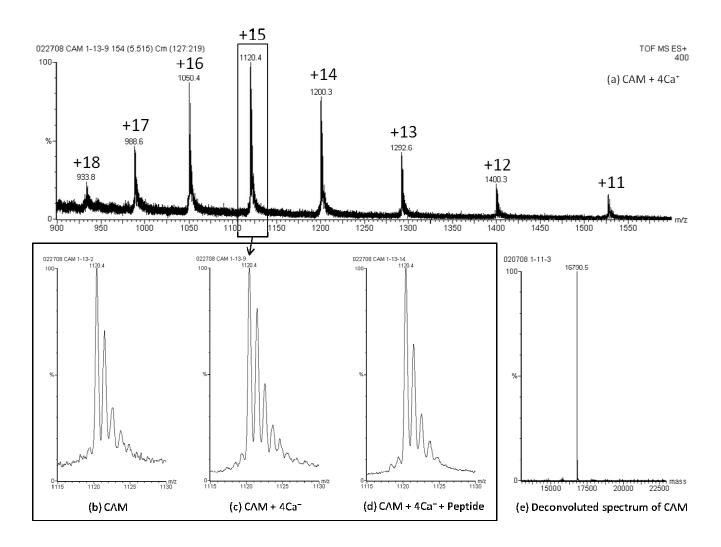


Figure S1. ESI Q-TOF mass spectrum: (a) Ca<sup>2+</sup>-bound CaM (b) Ca<sup>2+</sup>-free CaM in extended view (c) Ca<sup>2+</sup>-bound CaM in extended view (d)Ca<sup>2+</sup>-bound CaM-Mel in extended view (e) deconvoluted spectrum of CaM.

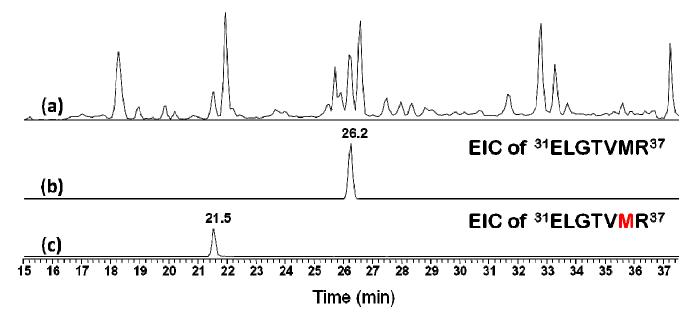


Figure S2. LC-MS results of CaM FPOP samples. (a) The Total Ion Chromatogram (TIC) of LC-MS experiment with all peptide peaks were labeled with different retention time. (b) Extracted Ion Chromatogram (EIC) of peptide 31-37 using doubly charged ion. (c) EIC of oxidized peptide 31-37 from doubly charged ion.

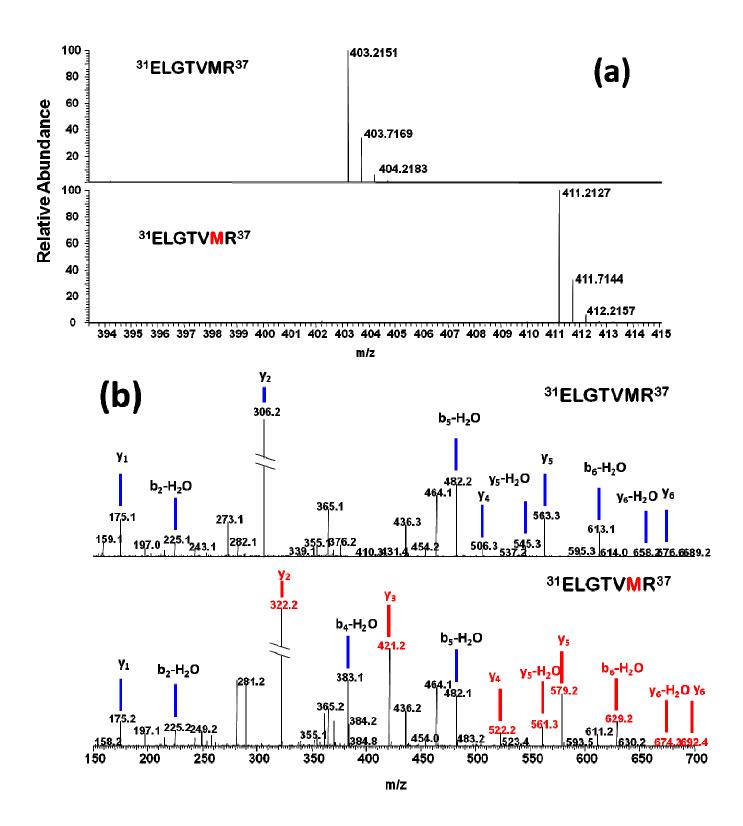


Figure 3. (a). Mass spectra of peptide 31-37 (doubly charged), unmodified peptide (top), and modified peptide (bottom). (b). Product-ion spectra (MS/MS) of unmodified (top) and modified (bottom) peptide 31-37. All ions with +16 mass shift induced by FPOP are in red.